



# WISHA Services

## Washington Industrial Safety and Health Act

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•A Mission to Accomplish: \* Save Lives \* Prevent Injuries and Illnesses \* Protect the Safety & Health of Washington's Workers

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# Ergonomics Rule Basics

Preventing Work-Related Musculoskeletal Disorders (WMSDs)

[WAC 296-62-051](#)

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Call 1-800-4-BE-SAFE for fatality reporting and WISHA information.  
WISHA On the Internet: [www.Lni.wa.gov/wisha](http://www.Lni.wa.gov/wisha)

# Our Objective is to:

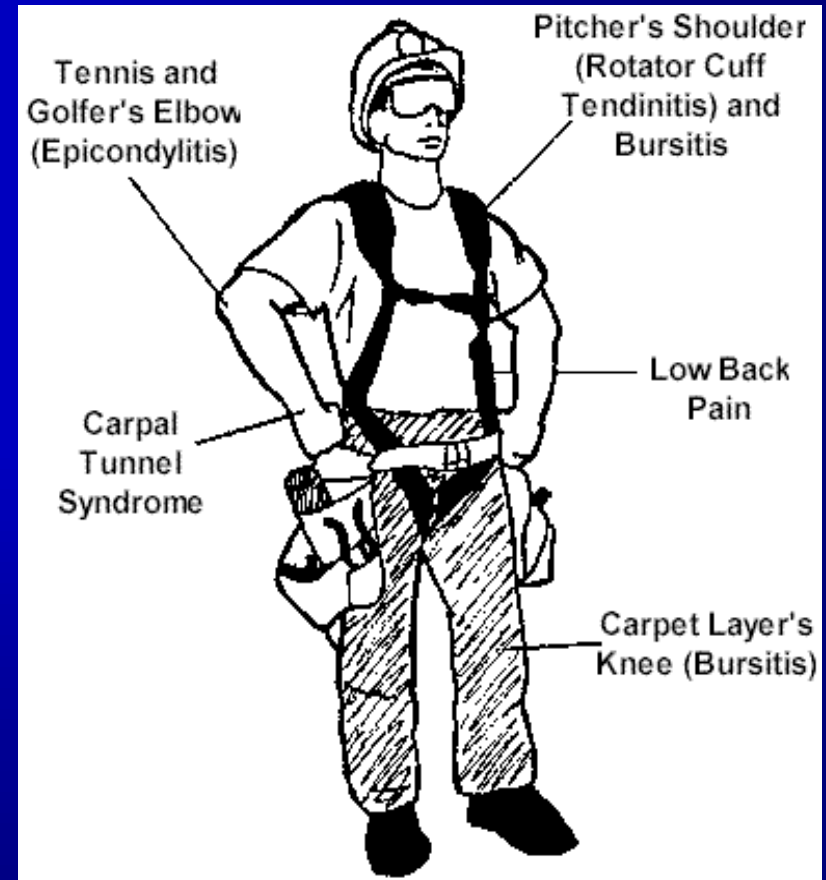
- Identify “caution zone jobs” and give examples
- Explain the requirements for “caution zone jobs” under the rule
- Explain resources that we have available to employers to assess hazards and reduce WMSDs

# What is Ergonomics?

*“Ergonomics is the science and practice of designing jobs or workplaces to match the capabilities and limitations of the human body.”*

# What are WMSDs?

Work-Related Musculoskeletal Disorders (WMSDs) are occupational disorders that involve soft tissues such as muscles, tendons, ligaments, joints, blood vessels and nerves.



# Implementing the Ergo Rule



# Implementing the Ergo Rule

Do you have "caution zone" jobs?



No

Not covered



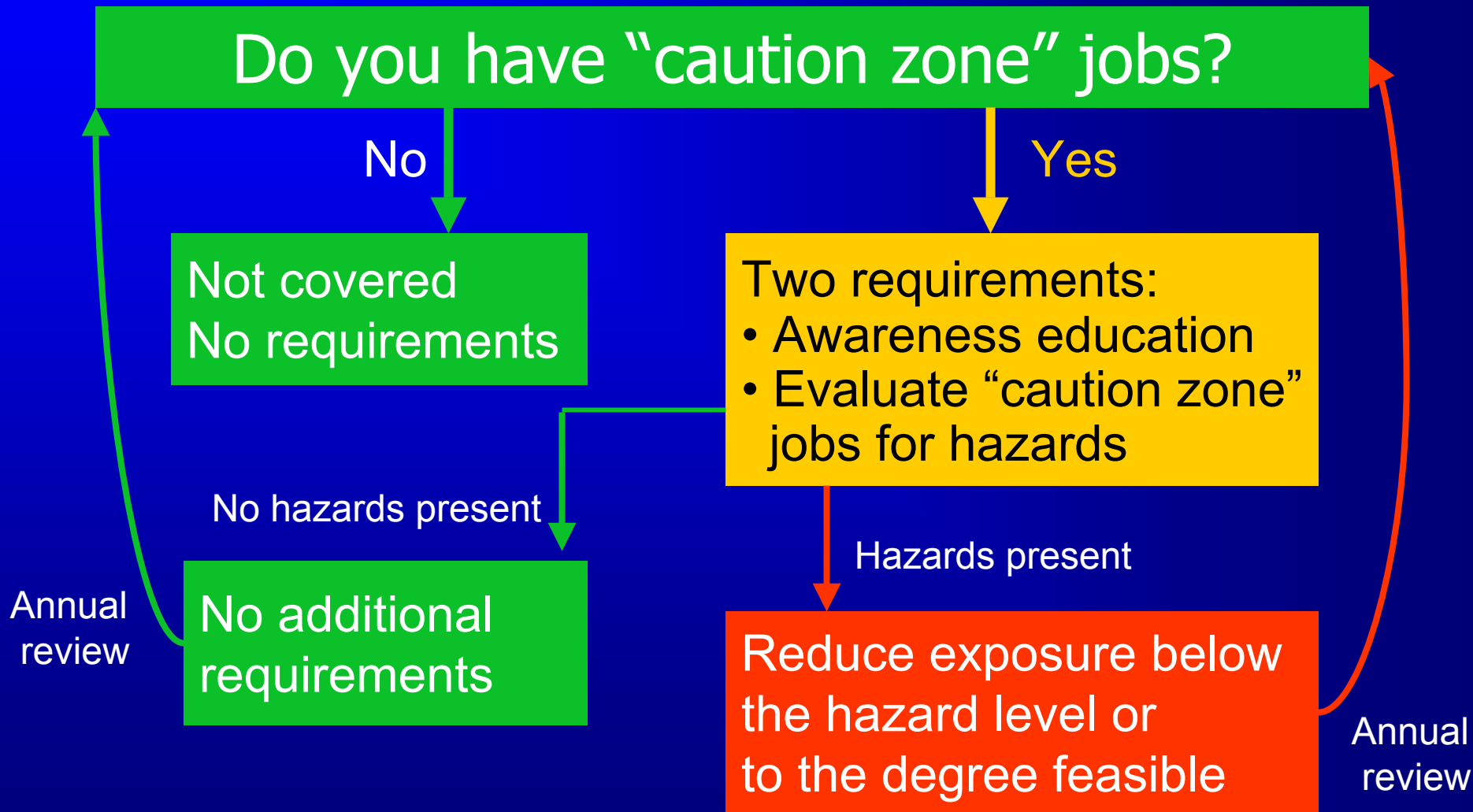
Yes

**Covered by Rule**

Am I covered  
by the Rule?



# “Caution Zone” Jobs Require Action



# The rule applies only to employers with “Caution Zone” jobs

- Caution Zone Jobs are not prohibited
- Reasonable determination only
- Incidental exposure is not included
  - more than 1 day/week and 1 week/year
- Duration is the actual exposure time to the specific risk factor



## What is a

## “Caution Zone” job?



## Look for these indicators:

- Awkward Postures
- High Hand Force
- Highly Repetitive Motion
- Repeated Impact
- Heavy, Frequent or Awkward Lifting
- Moderate to High Hand-Arm Vibration





# Awkward Postures

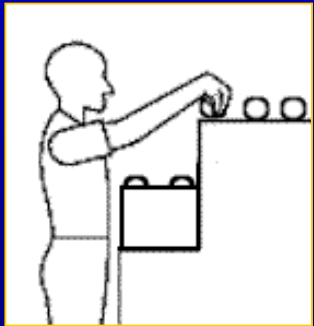
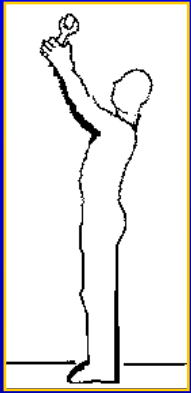
Working in these postures for  
**more than 2 hours total per day**

- Hands above head
- Elbow above shoulder
- Back bent forward more than 30 degrees
- Neck bent more than 30 degrees
- Squatting
- Kneeling



# Working with the hands overhead

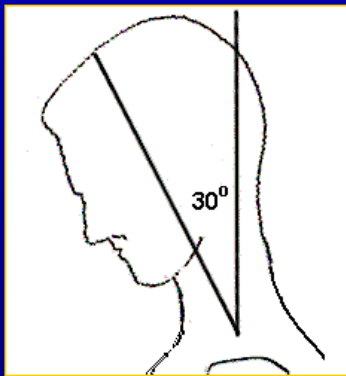
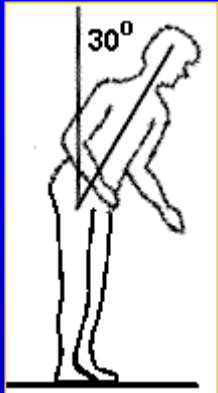
For more than 2 hours per day





# Neck or Back Bent Forward More than 30°

For more than 2 hours per day





## Squatting or Kneeling

For more than 2 hours per day



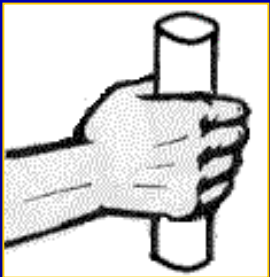


# High Hand Force

More than 2 hours per day of:



Pinching 2 or more pounds weight or 4 or more pounds force



Gripping 10 or more pounds weight or force





# Highly Repetitive Motion

Workers repeat same motion every few seconds for **more than 2 hours per day** with:

- neck
- shoulders
- elbows
- wrists
- hands



***Click Picture to View Video***

(Requires Real Player available here)





# Highly Repetitive Motion

Intensive keying for **more than 4 hours per day**



***Click Picture to View Video***

(Requires Real Player available here)

1-800-4BE-SAFE  
[www.Lni.wa.gov/wisha](http://www.Lni.wa.gov/wisha)



# Repeated Impact

Using hands or knees as a hammer

- more than 10 times per hour
- more than 2 hours per day





# Heavy, Frequent, or Awkward Lifting

Lifting objects more than:

- 75 lbs. **once/day**
- 55 lbs. more than **ten times/day**
- 10 lbs. more than **twice/minute** for more than **2 hours per day**
- 25 lbs. above shoulders, below knees, or at arms length for more than **25 times/day**





# Moderate to High Hand-Arm Vibration

## Moderate Level

more than 2 hours/day



## High Level

more than 30 Min/day



# Analyzing Caution Zone Jobs for Hazards

- Use a systematic method to look at:
  - physical demands
  - layout of work area
  - size, shape, and weight of objects handled
- The results will help to determine controls

# Hazard Zone Jobs

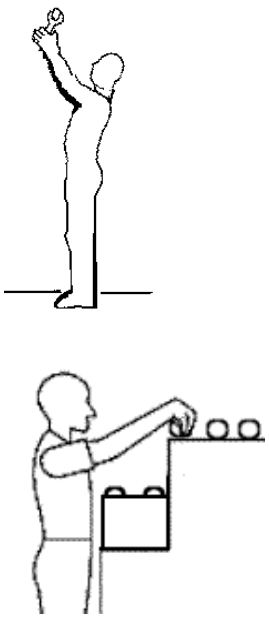


**(use Appendix B)**

← [click here to get to this checklist](#)

Risk factors become hazardous when:

➤ there is a longer duration of exposure

Shoulders	Working with the hand(s) above the head or the elbow(s) above the shoulder(s)	More than 4 hours total per day	
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# Hazard Zone Jobs





**(use Appendix B)**

← [click here to get to this checklist](#)

Risk factors become hazardous when:

➤ there is greater intensity

Back	Working with the back bent forward more than 30° (without support, or the ability to vary posture)	More than 4 hours total per day		<input type="checkbox"/>
	Working with the back bent forward more than 45° (without support or the ability to vary posture)	More than 2 hours total per day		<input type="checkbox"/>




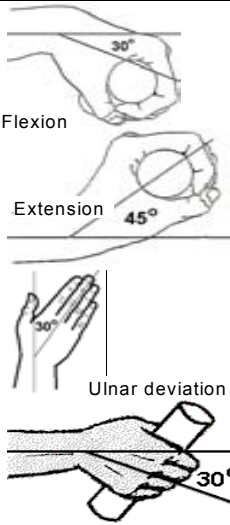


## Hazard Zone Jobs

**(use Appendix B)** ← click here to get to this checklist

## Risk factors become hazardous when:

➤ there is a combination of risk factors

<p>Arms, wrists, hands</p> 	<p>Gripping an unsupported object(s) weighing 10 or more pounds per hand, or gripping with a force of 10 pounds or more per hand (comparable to clamping light duty automotive jumper cables onto a battery)</p>	<p>Highly repetitive motion</p>	<p>More than 3 hours total per day</p>	
	<p>Wrists bent in flexion 30° or more, or in extension 45° or more, or in ulnar deviation 30° or more</p>	<p>More than 3 hours total per day</p>	 <p>Flexion 30°</p> <p>Extension 45°</p> <p>Ulnar deviation 30°</p>	



# Ergonomics Ideas

(click here to go to the Ideas bank)

## Using a carpet stretcher to eliminate knee impacts



# Ergonomics Ideas

(click here to go to the Ideas bank)

## Wallboard lifting system for installing drywall



# Ergonomics Ideas

(click here to go to the Ideas bank)

## Shoulder harness for landscaping tool to reduce hand forces



# Ergonomics Ideas

(click here to go to the Ideas bank)

Lift assist device to eliminate heavy, awkward lifts in nursing homes and home health care



# Implementing the Rule

What am I being  
required to do?



# If You Have “Caution Zone Jobs”, You Must:

- Begin an employee awareness education program
- Analyze your workplace for hazards
- Reduce any hazards you find

# Employee Ergonomics Awareness Education



- Ergonomics education is for employees in “caution zone jobs” and their supervisors
- Awareness education is portable
- Awareness education must be repeated every 3 years

# Employee Ergonomics Awareness Education



- Provide information on all “caution zone” risk factors
- Show the types, symptoms and impacts of WMSDs
- Show the importance of early reporting of symptoms
- Identify the hazards and measures to reduce them
- Teach the requirements of the ergonomics rule



# Employee Ergonomics Awareness Education



- L&I has materials available to help you comply with this requirement
- Materials are in a variety of forms
  - video
  - CD-ROM
  - slides
  - Internet-based

# Your Options to Analyze for Hazards

- General Performance Option
  - These are some widely used methods, (see the examples listed in the rule)
- Specific Performance Option
  - see the criteria in [Appendix B](#)
- Grandfather Clause Option
  - not required to re-analyze jobs if already done

# Reducing Identified Hazards

- You need to reduce hazards to below hazard level, or to a degree technologically and economically feasible through:
  - Engineering and administrative controls (preferred) *and/or*
  - Individual work practices and PPE
- Employers are not required to reduce employee hours to comply

# Job-Specific Training

- Job-specific training is required only if controls change the job or work practices
- Training must include:
  - hazards of the work activities
  - safe work practices
  - proper use and maintenance of control measures

# Employee Involvement

- Your safety committee must be involved in selecting the methods of employee participation
- Involve your employees in:
  - Analyzing “Caution Zone” Jobs
  - Selecting hazard control methods
  - Reviewing ergonomics activities annually
- Results must be shared with your safety committee

# Implementing the Rule

How long do I  
have to get into  
compliance?

Compliance dates  
are staggered over  
six years

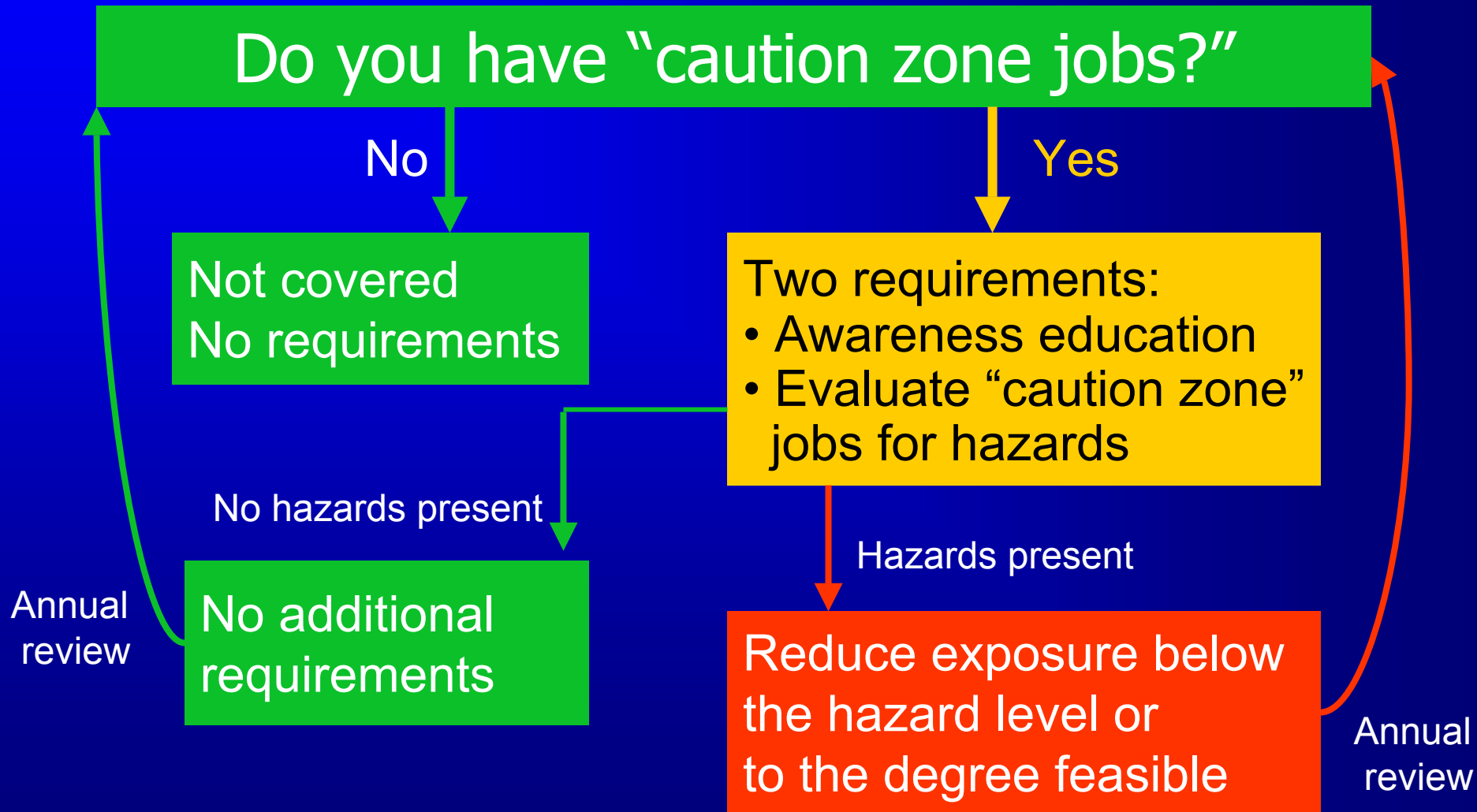


INITIAL IMPLEMENTATION SCHEDULE		
Employer	Awareness Education Completed And Hazard Analysis Completed	Hazard Reduction Completed
<b>Group 1:</b>  Large highest risk employers and L&I**	July 1, 2002	July 1, 2003
<b>Group 2:</b>  Smaller highest risk employers and all other large employers	July 1, 2003	July 1, 2004
<b>Group 3:</b>  All other moderate size employers	July 1, 2004	July 1, 2005
<b>Group 4:</b>  All other small employers	July 1, 2005	July 1, 2006
SUPPLEMENTAL IMPLEMENTATION SCHEDULE		
New workplaces or businesses	One year from the date the new workplace or business is established OR According to the schedule above	15 months from the date the new workplace or business is established OR According to the schedule above
Significant changes to existing workplaces or businesses	2 months after significant changes occur OR According to the schedule above	3 months after significant changes occur OR According to the schedule above
<p><b>**Group 1 Employers:</b> Employers in the highest risk industries with 50 or more FTEs, plus L&amp;I.</p> <p><i>General Building Contractors, Residential; Masonry and Stonework; Carpentry and Floor Work; Roofing, Siding and Sheet Metal Work; Concrete Work; Sawmills and Planing Mills; Residential Care; Trucking and Courier Service; Air Transportation and Air Courier; Grocery Stores; Landscaping and Horticultural Services; Nursing and Personal Care.</i></p> <p><b>Group 2 Employers:</b> All remaining employers in the highest risk industries. All remaining employers with 50 or more FTEs</p> <p><b>Group 3 Employers:</b> All remaining employers with 11-49 FTEs.</p> <p><b>Group 4 Employers:</b> All remaining employers with 1-10 FTEs.</p>		

[Click Here for a printable version of this Implementation Schedule](#)



# Remember "Caution Zone Jobs" Require Action





# Things not required by the rule

- No requirements for medical management
- No change in how claims are handled
- No violation of the rule solely because of injury or symptoms
- No recordkeeping or written program required

# Department of Labor & Industries Implementation Activities

- We are working with employers on demonstration projects:
  - To develop guides and models
  - To identify industry-specific “best practices”
  - To develop inspection policies and procedures
  - To share information on ergonomics
- A Blue Ribbon Panel has confirmed readiness

# Assistance is available

- Ergonomics workshops are available
- Ergonomics consultations are available on request
- WISHA ergo web site:  
[www.lni.wa.gov/wisha/ergo](http://www.lni.wa.gov/wisha/ergo)

Visit the WISHA Ergonomics web site for regular updates and additional help at <http://www.lni.wa.gov/wisha/ergo>

If you have questions regarding the ergonomics rule please [email an L&I ergonomist](mailto:ergonomics@lni.wa.gov) at: (ergonomics@lni.wa.gov)